

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Gjalt W. Huisman, Laura Z. Luo, Oliver P. Peoples

Serial No.: Continuation of 09/456,940

Art Unit: Not Yet Assigned

Filed: June 27, 2003

Examiner: Not Yet Assigned

For: *MICROBIAL STRAINS AND PROCESSES FOR THE MANUFACTURE OF
BIOMATERIALS*

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including six (6) pages of Form PTO-1449. All of the documents cited below were cited by or submitted to the Patent Office in Application Serial No. 09/456,940, filed December 7, 1999, to which the present application claims priority. Pursuant to 37 C.F.R. §1.98(d), Applicants are not enclosing copies of these publications. Copies will be provided upon request, however.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

U.S. Patents

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
4,326,052	04-20-1982	Kang, et al.	536/1
4,336,334	06-22-1982	Powell, et al.	435/146
4,377,636	03-22-1983	Kang, et al.	435/101
4,385,126	05-24-1983	Chen, et al.	436/518
4,400,467	08-23-1983	Bauer, et al.	435/104
4,477,654	10-16-1984	Holmes, et al.	528/361
4,503,084	03-05-1985	Baird, et al.	426/573
4,786,598	11-22-1988	Lafferty, et al.	435/146
4,948,733	08-14-1990	Easson, et al.	435/172.3
4,977,089	12-11-1990	Kovacevic, et al.	435/252.31
5,059,536	10-22-1991	Page, et al.	435/252.3
5,096,819	03-17-1992	Page, et al.	435/135
5,225,227	07-06-1993	Yalpani	426/580
5,229,158	07-20-1993	Yalpani	426/565
5,245,023	09-14-1993	Peoples, et al.	536/23.2
5,266,470	11-30-1993	Senior, et al.	435/135
5,290,910	03-01-1994	Shiotani, et al.	528/361
5,292,860	03-08-1994	Shiotani, et al.	528/361
5,302,525	04-12-1994	Groleau, et al.	435/252.1
5,334,520	08-02-1994	Dennis	435/136
5,344,769	09-06-1994	Witholt, et al.	435/135
5,346,817	09-13-1994	Akiyama, et al.	435/135
5,354,671	10-11-1994	Pollock	435/101
5,364,778	11-15-1994	Byrom	435/135
5,371,002	12-06-1994	Dennis, et al.	435/142
5,434,062	07-18-1995	Groleau, et al.	435/135
5,472,870	12-05-1995	Pollock, et al.	435/252.1
5,512,456	04-30-1996	Dennis	435/69.1
5,518,907	05-21-1996	Dennis	435/141
5,563,051	10-08-1996	Ellwood, et al.	435/101
5,663,063	09-02-1997	Peoples, et al.	435/135
5,679,556	10-21-1997	Homma, et al.	435/104
5,705,368	01-06-1998	Murofushi, et al.	435/104
5,792,630	08-11-1998	Tonouchi, et al.	435/101
5,821,109	10-13-1998	Ben-Bassat, et al.	435/252.1
5,854,034	12-29-1998	Pollock, et al.	435/101

Foreign Documents

<u>Number</u>	<u>Publication Date</u>	<u>Patentee</u>	<u>Country</u>
0 176 320	04-02-1986	Eli Lilly & Co.	EP
WO 91/13207	09-05-1991	Pulp & Paper Research Institute of Canada	PCT
WO 92/18553	10-29-1992	Kohap, Ltd.	PCT
WO 92/21708	12-10-1992	Kirin Beer Kabushiki Kaisha	PCT
WO 94/10289	05-11-1994	Zeneca, Ltd.	PCT
WO 94/24302	10-27-1994	Zeneca, Ltd.	PCT
WO 95/10614	04-20-1995	GX Biosystems A/S	PCT
WO 95/34643	12-21-1995	Wackernagel	PCT
WO 96/00263	01-04-1996	Stichting Onderzoek En Ontwikkeling Noord Nederland	PCT
WO 96/17369	06-06-1996	Cookson Group, PLC	PCT

Publications

AHRENHOLTZ, et al., "A conditional suicide system in *Escherichia coli* based on the intracellular degradation of DNA," *Appl. Environ. Microbiol.* 60(10): 3746-3751 (1994).

ATKINSON & MAVITUNA, Biochemical Engineering and Biotechnology Handbook, 2nd ed., Stockton Press: New York (1991).

CHEN, et al., "Bacterial alginate produced by a mutant of *Azobacter vinelandii*," *Appl. Environ. Microbiol.* 49: 543-546 (1985).

CHEN, et al., "Anaerobic degradation of veratrylglycerol- β -guaiacyl ether and guaiacoxycetic acid by mixed rumen bacteria," *Appl. Environ. Microbiol.* 50(6): 1451-1456 (1985).

DELEST, "Fermentation technology of microbial polysaccharides," in Gums and Stabilisers for the Food Industry 5, (Phillips, et al., eds.) IRL Press: New York, pp. 301-313 (1989).

DOI, "Microbial synthesis, physical properties, and biodegradability of polyhydroxyalkanoates," *Macromol. Symp.* 98: 585-599 (1995).

DOUGHERTY & VAN DE RIJN, "Molecular characterization of *hasA* from an operon required for hyaluronic acid synthesis in group A streptococci," *J. Biol. Chem.* 269(1): 169-175 (1994).

FIALHO, et al., "Conjugal transfer of recombinant plasmids into gellan gum-producing and non-producing variants of *Pseudomonas elodea* ATCC 31461," *Lett. Appl. Microbiol.* 12(3): 85-87 (1991).

HASSLER & DOHERTY, "Genetic engineering of polysaccharide structure: production of variants of xanthan gum in *Xanthomonas campestris*," *Biotechnol. Prog.* 6(3): 182-187 (1990).

HERRERO, et al., "Transposon vectors containing non-antibiotic resistance selection markers for cloning and stable chromosomal insertion of foreign genes in gram-negative bacteria," *J. Bacteriol.* 172: 6557-6567 (1990).

KENNEDY & BRADSHAW, "Production, properties, and applications of xanthan," *Prog. Ind. Microbiol.* 19: 319-371 (1984).

LE LOIR, et al., "Direct screening of recombinants in gram-positive bacteria using the secreted staphylococcal nuclease as a reporter," *J. Bacteriol.* 176(16): 5135-5139 (1994).

LEE & CHANG, "Production of poly(hydroxyalkanoic acid)," *Adv. Biochem. Eng. Biotechnol.* 52: 27-58 (1995).

LIEBL, et al., "Expression, secretion, and processing of staphylococcal nuclease by *Corynebacterium glutamicum*," *J. Bacteriol.* 174(6): 1854-1861 (1992).

MILLER, ed., Methods in Enzymology: Bacterial Genetic Systems, vol. 204, Academic Press: New York (1991).

MILLER, et al., "Secretion and processing of staphylococcal nuclease by *Bacillus subtilis*," *J. Bacteriol.* 169(8): 3508-3514 (1987).

PEOPLES, et al., "Poly- β -hydroxybutyrate (PHB) biosynthesis in *Alcaligenes eutrophus* H16. Identification and characterization of the PHB polymerase gene (*phbC*)," *Biol. Chem.* 264(26): 15298-15303 (1989).

PEOPLES & SINSKEY, "Fine structural analysis of the *Zoogloea ramigera phbA-phbB* locus encoding β -ketothiolase and acetoacetyl-CoA reductase: nucleotide sequence of *phbB*," *Mol. Microbiol.* 3(3): 349-357 (1989).

POIRIER, et al., "Production of polyhydroxyalkanoates, a family of biodegradable plastics and elastomers, in bacteria and plants," *Bio/Technol.* 13: 142-150 (1995).

POLLOCK, "Gellan-related polysaccharides and the genus *Sphingomonas*," *J. Gen. Microbiol.* 139: 1939-1945 (1993).

SAMBROOK, et al., Molecular Cloning, A Laboratory Manual, 2nd ed., Cold Spring Harbor Laboratory Press: New York (1992).

SHORTLE, "A genetic system for analysis of staphylococcal nuclease," *Gene* 22(2-3): 181-189 (1983).

SPRATT, et al., "Kanamycin-resistant vectors that are analogues of plasmids pUC8, pUC9, pEMBL8, and pEMBL9," *Gene* 41(2-3): 337-342 (1986).

VAN DER KOOIJ, et al., "Growth of *Pseudomonas aeruginosa* in tap water in relation to utilization of substrates at concentrations of a few micrograms per liter," *Appl. Environ. Microbiol.* 44(5): 1086-1095 (1982).

WELLS, "Extracellular microbial polysaccharides – a critical overview," in Extracellular Microbial Polysaccharides (Sanford, et al., eds.) ACS: Washington, DC, pp. 299-313 (1977).

WILLIAMS & PEOPLES, "Biodegradable plastics from plants," *CHEMTECH* 26: 38-44 (1996).

Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Patrea L. Pabst', written over a horizontal line.

Patrea L. Pabst
Reg. No. 31,284

Dated: June 27, 2003

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				Application Number		
				Continuation Number 109/456,940		
				Filing Date		
				June 27, 2003		
				First Named Inventor		
				Gjalt W. Hulsman		
				Group Art Unit		
				Examiner Name		
				Attorney Docket Number		
				MBX 025 DIV CON		
Sheet	1	of	6			

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		4,326,052		Kang, et al.	04-20-1982	
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		4,377,636		Kang, et al.	03-22-1983	
		4,385,126		Chen, et al.	05-24-1983	
		4,400,467		Bauer, et al.	08-23-1983	
		4,477,654		Holmes, et al.	10-16-1984	
		4,503,084		Baird, et al.	03-05-1985	
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		5,225,227		Yalpani	07-06-1993	
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		EP	0 176 320		Eli Lilly & Co.	04-02-1986		
		PCT	WO 91/13207		Pulp & Paper Research Institute of Canada	09-05-1991		
		PCT	WO 92/18553		Kohap, Ltd.	10-29-1992		
		PCT	WO 92/21708		Kirin Beer Kabushiki Kaisha	12-10-1992		
		PCT	WO 94/10289		Zeneca, Ltd.	05-11-1994		
		PCT	WO 94/24302		Zeneca, Ltd.	10-27-1994		

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		5,292,860		Shiotani, et al.	03-08-1994	
		5,302,525		Groleau, et al.	04-12-1994	
		5,334,520		Dennis	08-02-1994	
		5,344,769		Witholt, et al.	09-06-1994	
		5,346,817		Akiyama, et al.	09-13-1994	
		5,354,671		Pollock	10-11-1994	
		5,364,778		Byrom	11-15-1994	
		5,371,002		Dennis, et al.	12-06-1994	
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		5,472,870		Pollock, et al.	12-05-1995	
		5,512,456		Dennis	04-30-1996	
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		PCT	WO 95/10614		GX Biosystems A/S	04-20-1995		
		PCT	WO 95/34643		Wackernagel	12-21-1995		
		PCT	WO 96/00263		Stichting Onderzoek En Ontwikkeling Noord Nederland	01-04-1996		
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		5,705,368		Murofushi, et al.	01-06-1998	
		5,792,630		Tonouchi, et al.	08-11-1998	
		5,821,109		Ben-Bassat, et al.	10-13-1998	
		5,854,034		Pollock, et al.	12-29-1998	

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OTHER ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		AHRENHOLTZ, et al., "A conditional suicide system in <i>Escherichia coli</i> based on the intracellular degradation of DNA," <i>Appl. Environ. Microbiol.</i> 60(10): 3746-3751 (1994).	
		ATKINSON & MAVITUNA, <i>Biochemical Engineering and Biotechnology Handbook</i> , 2 nd ed., Stockton Press: New York (1991).	
		CHEN, et al., "Bacterial alginate produced by a mutant of <i>Azobacter vinelandii</i> ," <i>Appl. Environ. Microbiol.</i> 49: 543-546 (1985).	
		CHEN, et al., "Anaerobic degradation of veratrylglycerol-β-guaiacyl ether and guaiacoxycetic acid by mixed rumen bacteria," <i>Appl. Environ. Microbiol.</i> 50(6): 1451-1456 (1985).	
		DELEST, "Fermentation technology of microbial polysaccharides," in <i>Gums and Stabilisers for the Food Industry 5</i> , (Phillips, et al., eds.) IRL Press: New York, pp. 301-313 (1989).	
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		DOUGHERTY & VAN DE RIJN, "Molecular characterization of <i>hasA</i> from an operon required for hyaluronic acid synthesis in group A streptococci," <i>J. Biol. Chem.</i> 269(1): 169-175 (1994).	
		FIALHO, et al., "Conjugal transfer of recombinant plasmids into gellan gum-producing and non-producing variants of <i>Pseudomonas elodea</i> ATCC 31461," <i>Let. Appl. Microbiol.</i> 12(3): 85-87 (1991).	
		HASSLER & DOHERTY, "Genetic engineering of polysaccharide structure: production of variants of xanthan gum in <i>Xanthomonas campestris</i> ," <i>Biotechnol. Prog.</i> 6(3): 182-187 (1990).	
		HERRERO, et al., "Transposon vectors containing non-antibiotic resistance selection markers for cloning and stable chromosomal insertion of foreign genes in gram-negative bacteria," <i>J. Bacteriol.</i> 172: 6557-6567 (1990).	

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OTHER ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		KENNEDY & BRADSHAW, "Production, properties, and applications of xanthan," <i>Prog. Ind. Microbiol.</i> 19: 319-371 (1984).	
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		PEOPLES & SINSKEY, "Fine structural analysis of the <i>Zoogloea ramigera</i> phbA-phbB locus encoding β-ketothiolase and acetoacetyl-CoA reductase: nucleotide sequence of phbB," <i>Mol. Microbiol.</i> 3(3): 349-357 (1989).	
		POIRIER, et al., "Production of polyhydroxyalkanoates, a family of biodegradable plastics and elastomers, in bacteria and plants," <i>Bio/Technol.</i> 13: 142-150 (1995).	
		POLLOCK, "Gellan-related polysaccharides and the genus <i>Sphingomonas</i> ," <i>J. Gen. Microbiol.</i> 139: 1939-1945 (1993).	

Examiner's Signature		Date Considered	
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				Applicant Number		Continuation of 09/456,940	
				Filing Date		June 27, 2003	
				First Named Inventor		Gjalt W. Hulsman	
				Group Art Unit			
				Examiner Name			
Sheet	6	of	6	Attorney Docket Number		MBX 025 DIV CON	

OTHER ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		SAMBROOK, et al., <u>Molecular Cloning, A Laboratory Manual</u> , 2 nd ed., Cold Spring Harbor Laboratory Press: New York (1992).	
		SHORTLE, "A genetic system for analysis of staphylococcal nuclease," <i>Gene</i> 22(2-3): 181-189 (1983).	
		SPRATT, et al., "Kanamycin-resistant vectors that are analogues of plasmids pUC8, pUC9, pEMBL8, and pEMBL9," <i>Gene</i> 41(2-3): 337-342 (1986).	
		VAN DER KOOIJ, et al., "Growth of <i>Pseudomonas aeruginosa</i> in tap water in relation to utilization of substrates at concentrations of a few micrograms per liter," <i>Appl. Environ. Microbiol.</i> 44(5): 1086-1095 (1982).	
		WELLS, "Extracellular microbial polysaccharides - a critical overview," in <u>Extracellular Microbial Polysaccharides</u> (Sanford, et al., eds.) ACS: Washington, DC, pp. 299-313 (1977).	
		WILLIAMS & PEOPLES, "Biodegradable plastics from plants," <i>CHEMTECH</i> 26: 38-44 (1996).	

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